

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 02-283084

(43)Date of publication of application : 20.11.1990

(51)Int.Cl. H01S 3/18
// H01L 21/205

(21)Application number : 01-105059

(71)Applicant : FUJITSU LTD

(22)Date of filing : 25.04.1989

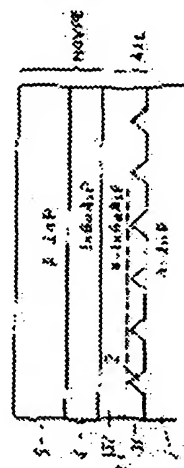
(72)Inventor : FUJII TAKUYA
YAMAZAKI SUSUMU

(54) MANUFACTURE OF SEMICONDUCTOR LASER

(57)Abstract:

PURPOSE: To avoid a thermal deformation and to form an optical guide layer thereon while maintaining the height of a protrusionlike diffraction grating provided on a substrate at a predetermined value by vapor growing at a low temperature by an atomic layer epitaxial growth (ALE) method.

CONSTITUTION: Part 31 of an InGaAsP layer for forming an optical guide layer 3 is formed on an InP substrate 1 provided with a diffraction grating 2, the grating 2 is covered therewith, and the residue 32 of the layer 3, an active layer 4 and a clad layer 5 are then sequentially formed by a normal MOVPE method. The grating 2 is not thermally deformed at 400° C, and not thermally deformed at 400-650° C after it is covered with an InGaAsP layer 31. Accordingly, the grating can preserve a predetermined height of the state provided initially on the substrate. The residue 32 of the layer and the other layer 4, the layer 5, etc., are formed by a normal MOVPE method.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]